Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (amended) A network management and service provisioning ~~environment comprising a~~ framework for a network management and service provisioning system, the framework ~~including~~ comprising:

   ~~a.an implementation of a single managed entity object class, the single managed entity object class being run-time derivable via type derivation into a hierarchy of managed entity object types, minimizing the need to re-code and re-compile framework software application code in support of new managed entity object types;~~

   ~~b.~~a. a registry for run-time registration of at least one plug-in brokering access to network management and service provisioning enabling technologies;

   ~~c.~~b. a parser for processing at least one managed data network entity specification;

   c. a generic lexical analyzer interpreting at least one directive parsed from the managed data network entity specification;

d. an implementation of a single managed entity object class, the single managed entity object class being run-time derivable via type derivation into a hierarchy of managed data network object types based on the parsed directive, the single management entity object class further comprising an implementation of an invoke function for invoking at least one operation by name;

~~d.~~e. a dictionary of operations holding a roster of ~~function~~ operation names of registered ~~functions~~ operations, ~~the function~~ each operation defining a method[[s]] associated with a derived ~~entity~~ managed data network object type[[s]]; and

~~e.a generic lexical analyzer interpreting at least one directive; and~~

f. an interpreter for processing messages received from at least one network management and service provisioning software application by invoking a registered operation by the corresponding operation name on an instance of the derived managed data network object type,

wherein a separation is achieved between managed data network entities, enabling technologies and software applications, the separation enabling independent development, maintenance and troubleshooting in providing network management and service provisioning ~~solutions~~, and the run-time derivation of the single managed entity object class and invoking the operation by name minimizing the need to re-code and re-compile framework software application code in support of new managed entity object types, the dictionary of operations providing run-time support for polymorphic operation invocation.

2. (amended) A network management and service provisioning framework ~~environment~~ as claimed in claim 1, wherein the derivation of the managed ~~entity~~ data network object type hierarchy includes the specification of at least one attribute.

3. (amended) A network management and service provisioning framework ~~environment~~ as claimed in claim 1, wherein the ~~at least one~~ managed data network entity specification includes at least one human-readable file.

4. (amended) A network management and service provisioning framework ~~environment~~ as claimed in claim 3, wherein ~~the~~ each human-readable file is an attribute file holding attributes corresponding to a single managed ~~entity~~ data network object type derivable at run-time in one of a direct and an indirect manner from the single managed entity object class.

5. (amended) A network management and service provisioning framework ~~environment~~ as claimed in claim 1, wherein the ~~at least one~~ managed data network entity specification ~~includes~~ comprises at least one implementation of the operation having the operation name ~~at least one method associated therewith~~.

6. (amended) A network management and service provisioning framework ~~environment~~ as claimed in claim 1, wherein the at least one directive includes an attribute specification.

7. (amended) A network management and service provisioning framework ~~environment~~ as claimed in claim 6, wherein the attribute specification further specifies managed ~~entity~~ data network object type inheritance.

8. (amended) A network management and service provisioning framework ~~environment~~ as claimed in claim 1, wherein the network management and service provisioning enabling technologies include support for at least one of a persistence method and a persistence entity.

9. (amended) A network management and service provisioning framework ~~environment~~ as claimed in claim 1, wherein the at least one directive further specifies a command sequence to be followed in using a specific registered enabling technology.

10. (amended) A network management and service provisioning framework ~~environment~~ as claimed in claim 9, ~~wherein the framework~~ further comprising [[es]] at least one registered enabling technology specific lexical analyzer stub for interpreting at least one enabling technology specific directive.

11. (amended) A network management and service provisioning apparatus implementing the network management and service provisioning ~~environment~~ framework claimed in claim 1.

12. (amended) A method of ~~providing a~~ performing network management and service provisioning, ~~solution~~ the method comprising steps of:

    a. registering with a network management and service provisioning framework at least one plug-in brokering access to at least one network management and service provisioning enabling technology;

    b. parsing at least one managed data network entity specification loaded by the framework;

c. deriving a single managed entity object class into a managed entity object type hierarchy of at least one managed ~~entity~~ data network object type[[s]] via type derivation in accordance with at least one entity directive parsed from the managed data network entity specification;

d. registering with a dictionary of operations at least one operation name specified in the managed data network entity specification, the operation name corresponding to an operation implemented by the derived managed data network object type; and

~~d.~~e. processing at least one message received by the framework from at least one network management and service provisioning software application by invoking the registered operation by the corresponding operation name registered with the dictionary of operations on an instance of the derived managed data network object type,;

~~wherein~~the framework acting[[s]] as an enabler by separating managed data network entities, enabling technologies and software applications, ~~as well~~ and as a facilitator therebetween ~~in providing the network management and service provisioning solution~~, dictionary lookups providing run-time support for polymorphic operation invocation.

13. (amended) A method as claimed in claim 12, wherein processing the at least one message received by the framework, the method comprises a further step of deriving a containment hierarchy of managed ~~entity~~ data network object type instances corresponding to field installed data network equipment.

14. (original) A method as claimed in claim 12, wherein registering with the framework at least one plug-in, the method further comprises a step of run-time registering the at least one plug-in.

15. (original) A method as claimed in claim 14, wherein run-time registering the at least one plug-in, the method further comprises a prior step of: selecting the at least one plug-in for registration thereof.

16. (original) A method as claimed in claim 12, wherein parsing the at least one managed data network entity specification loaded by the framework, the method further comprises a step of: run-time loading the at least one managed data network entity specification.

17. (original) A method as claimed in claim 16, wherein run-time loading the at least one managed data network entity specification, the method further comprises a prior step of: selecting the at least one managed data network entity specification.

18. (deleted) ~~A method as claimed in claim 12, wherein parsing, the method further comprises a step of: extracting at least one directive therefrom, the at least one managed data network entity specification being associated with at least one managed entity object type.~~

19. (amended) A method as claimed in claim 12, wherein deriving a single managed entity object class via type derivation, the method further comprises a step of setting at least one attribute in accordance with the parsed entity directive.

20. (original) A method as claimed in claim 12, wherein prior to processing the at least one message received by the framework from the at least one software application, the method further comprises a step of: registering the at least one software application with the framework.

21. (original) A method as claimed in claim 12, wherein processing the at least one message received by the framework; the method further comprises a step of: implementing a directive specified in the at least one managed data network entity specification using a lexical analyzer stub associated with the at least one plug-in.

22. (amended) A method as claimed in claim 21, wherein implementing the directive, the method further comprises a step of: instantiating a managed ~~entity~~ data network object type[[s]].

23. (original) A method as claimed in claim 21, wherein implementing the directive the method further comprises a step of: effecting a change in a network state of a managed data transport network in a realm of management.

24. (original) A method as claimed in claim 12, wherein subsequent to processing the at least one message received by the framework; the method further comprises a step of: sending a subsequent message to the software application.

25. (deleted) ~~A method as claimed in claim 12, wherein parsing the at least one managed data network entity specification, the method further comprises a step of: registering at least one method associated with at least one derived managed entity object type.~~

26. (amended) A method as claimed in claim 12~~-25~~, wherein registering the at least one ~~method~~ operation name~~associated with at least one derived managed entity object type~~, the method further comprises a step of: making a dictionary entry in ~~a~~ the dictionary of operations~~, the dictionary entry specifying a name associated with the registered method~~.

27. (amended) A method as claimed in claim_26~~–25~~, wherein making the dictionary entry in the dictionary, the method further comprises a step of using name spaces techniques to associate each operation name with a corresponding derived managed ~~entity~~ data network object type[[s]] ~~with corresponding registered methods~~.